



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

6g

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/639,761	08/15/2000	Mayumi Noguchi	1341.1059/JDH	4065
21171	7590	05/02/2005	EXAMINER	
STAAS & HALSEY LLP SUITE 700 1201 NEW YORK AVENUE, N.W. WASHINGTON, DC 20005			LIN, WEN TAI	
			ART UNIT	PAPER NUMBER
			2154	

DATE MAILED: 05/02/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)
	09/639,761	NOGUCHI ET AL.
	Examiner	Art Unit
	Wen-Tai Lin	2154

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 10/15/2004 (RCE) and 2/3/05 (petition).
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1, 4-5, 8 and 11-19 is/are rejected.
- 7) Claim(s) 2,3,6,7,9 and 10 is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All b) Some * c) None of:
1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) Notice of References Cited (PTO-892)
2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) Notice of Informal Patent Application (PTO-152)
6) Other: _____

DETAILED ACTION

Claims 1-19 are presented for examination.

1. The finality of the previous office action is withdrawn as a result of Applicant's petition to the technology center's SPRE, dated 2/3/2005.
2. The text of those sections of Title 35, USC code not included in this action can be found in the prior Office Action.

Claim Rejections - 35 USC § 103

3. Claims 1, 4-5 and 11-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Krishnamurthy et al. (hereafter "Krishnamurthy") [U.S. Pat. No. 6421676].
4. Krishnamurthy was cited in the previous office actions.
5. As to claim 1, Krishnamurthy teaches the invention substantially as claimed including: an information collection apparatus which collects information via transmission paths from a plurality of information generation apparatuses [104-108,

Fig.1; note that due to Krishnamurthy's hierarchical information collection structure, the down-stream collectors can be viewed as "information generation apparatuses" relative to their up-stream collectors], wherein each of said information generation apparatuses has a generation-side information storage unit which stores the information generated due to a specific generation factor [302, Fig.3; col.3, lines 16-23], said information collection apparatus comprising:

- a table storage unit which stores a priority definition table in which respective priorities of said plurality of information generation apparatuses are defined [402, 404, Fig.4; col.5, lines 14-21; col.6, lines 21-38 and 57-65];
- an information collection unit which refers to the priority definition table upon reception of a notice from an information generation apparatus that is any of said information generation apparatuses and in which an amount of information stored on said generation-side information storage unit is available [Abstract: lines 5-10; col.5, lines 1-41], and only collects the information stored on the generation-side information storage unit of said information generation apparatus if the priority of said information generation apparatus is higher than a preset priority [col.3, lines 15-30, which teaches a general condition that data is collected based on characteristic such as priority ... , wherein the so called "preset priority" is a rather arbitrary parameter because it can either be viewed as a static parameter setting to zero (the lowest priority level) or a dynamic parameter setting to the second highest priority in a priority queue for certain time window (col.6, lines 21-57)];

Art Unit: 2154

and

- a collection-side information storage unit which stores the information collected by said information collection unit [112-114, Fig.1A; Fig.3].

Krishnamurthy does not specifically teach that the information generation apparatus issues the availability of data to its upstream collector when the locally stored data has reached a predetermined amount. However, Krishnamurthy teaches that data is collected based on availability of the source [col.3, lines 22-25], Krishnamurthy further teaches that current time (i.e., relative to scheduled time), current load, available depot space, and available threads are factors for determining uploading of data [col.5, lines 22-41]. As such, it is obvious to one of ordinary skill in the art that Krishnamurthy's down-stream collectors (or information generation apparatuses) could have issued data availability to their up-stream collectors when each of the local storages has reached a predetermined level, because each local storage unit has limited space.

6. As to claims 4-5 and 11-19, since the features of all these claims can also be found in claim 1, they are rejected for the same reasons set forth in the rejection of claim 1 above. Specifically, claims 4-5 focus on collection of only stored information with priorities higher than a preset value; claim 11 directs the similar features of claim 1's information generator to information storage unit; claims 12-13 focus on a computer recording medium, rather than a method; and claims 14-19 focuses on the log generating units of computer systems. All these slight variations are deemed to be obvious in light of Krishnamurthy's teachings, because each of Krishnamurthy's

information generator unit also has data storage unit of limited size and their associated priorities are separately assigned. Furthermore, it is obvious that Krishnamurthy's information generation and collection method is also applicable to a networked computing environment, wherein each computer is provided an event logger with event (in particular for error events) collection and reporting functionalities. As for the fact that collection of logged data could be triggered by the size of the log (see claims 17-19), such feature is also obvious because for critical data, such as captured errors, triggering the transfer of collected data is obvious and essential because this is the most efficient way to avoid overflowing local storage units.

7. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Krishnamurthy et al. (hereafter "Krishnamurthy") [U.S. Pat. No. 6421676] in view of Official Notice.

8. As to claim 8, Krishnamurthy's teaches most of the features of these claims except for the condition for data collection is being set upon a situation: when a given error has occurred in the information generation apparatus.

However, Official Notice is taken that the feature of triggering data collection by specified errors is well known in the art. For example, under the notion of error recovery and fault tolerance, critical information (i.e., having higher priorities) is normally collected prior to that of non-critical data.

It would have been obvious to one of the ordinary skill in the art to find that Krishnamurthy's collection method may also applicable to such a critical stages wherein higher priority is given to those data generation units that are potentially failing, because giving priority to collection of the critical data could facilitate the error recovery or fail-over processes.

9. Claims 2-3, 6-7 and 9-10 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

10. Applicant's arguments with respect to claims 1, 4-5, 8 and 11-13 on 9/15/2004 have been considered but they are not deemed to be persuasive.

11. In the remarks, Applicant argues that :

- (i) Krishnamurthy's collector is different from that of Applicant's because the former always collects requested data, while the latter collects data for a request if the generator has high priority.
- (ii) The queue of Krishnamurthy is not equivalent to Applicant's priority table.
- (iii) Krishnamurthy's system has per-collection priority, not generation apparatus priority. That is, the priority in Krishnamurthy's system is associated with the collection, not the generating device.

- (iv) A collector is not an information generator (see more details in Applicant's remark under this subtitle).
- (v) Modifiability of a reference is not valid grounds for obviousness. The rejection is based on the reasoning that because a collector has limited data collection storage (cache) it could therefore issue a notice that data is available for collection when the storage is full. However, this is not sufficient to establish a case of obviousness. No motive was provided. Furthermore, it does not appear that Krishnamurthy could issue data availability to an up-stream collector based on data storage level because the priority of a collection (data collected) is initially fixed by the endpoint generator.
- (vi) The dependent claims are also patentable due to their recitation of independently distinguishing features. For example, claim 2 recites allowable features not taught or suggested by the prior art.

12. The examiner respectfully disagrees with Applicant's argument.
- (1) As to point (iv): Applicant's own definition smears the borderline between a collector and an information generator. Specifically, on page 1, lines 6-9 of Applicant's specification: "... an information generation apparatus which collects information (e.g., logs) from a plurality of local machines (computer devices) or generates information." If an apparatus that collects information from other local machines is still called an information generation apparatus, then calling any of Krishnamurthy's down-stream collectors as generation apparatuses is also appropriate. This is also true even without referring to Applicant's definition above because each of Krishnamurthy's collector

Art Unit: 2154

collects information from a plurality of its adjacent down-stream collectors (or end-points) and forms a new data stream to its adjacent up-stream collector. Such a collector is the source of the newly formed data stream and is appropriate to be called an information generation apparatus for the kind of new data stream it has generated.

(2) As to items (i) and (ii) above: similar issues had been raised in Applicant's response to the previous non-final office action and had been properly responded by the examiner in the previous final office action. Specifically, since the claim language does not disclose: (1) how the preset priority threshold and the priorities associated with each of the generation apparatuses are set and (2) how are they changed in time (e.g., whether they are dynamically modified in accordance with the traffic condition or are simply static values throughout the entire collection course), the priority threshold has been construed as rather arbitrary. For example, by setting the priority threshold to the lowest level, Applicant's collection system would produce equivalent result as that of Krishnamurthy, because potentially all the generated data would be collected (unless being overwritten due to shortage in local storage space). On the other hand, if some generation apparatuses' priorities are "always" set below the priority threshold, then it is equivalent to prohibiting the collection of data from these apparatuses and an equivalent implementation in Krishnamurthy's system would be setting the activation duration of the respective CTOC to zero (see 420a and 420b of Fig.4A). In other words, without further defining the variability of the preset priority and the generator-associated

Art Unit: 2154

priorities, Krishnamurthy's queue-based collector is functionally equivalent to Applicant's table-based collector.

(3) As to point (iii): the examiner disagrees with Applicant's assertion. Specifically, each of Krishnamurthy's CTOC element, which contains a unique ID and priority, is submitted from the data-generation end-point [see col.7, lines 13-19]. Furthermore, the collected CTOC elements are not merged; rather, they are presented in an output queue [see 402, 404, Fig.4A]. As such, it is clear that the priority value in Krishnamurthy's CTOC is originated in the end-point.

(4) As to point (v): Applicant is reminded that the obviousness reasoning is not only based on the fact that each down-stream collector or end-point information generator has limited data storage space, but also based on Krishnamurthy teaching that data is collected based on availability of the source [col.3, lines 22-25] (see paragraph #4 of the instant office action). To know whether data from a down-stream collector or end-point information generator is available or not, it is well known that proactive reporting (e.g., by sending out notice) is more efficient than polling by the up-stream collector.

(5) As to point (vi): Applicant appears to have ignored the objection statement about claims 2, 3, 6, 7, 9 and 10, which was further confirmed at page 1, line 5 of Applicant's own Remarks.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Wen-Tai Lin whose telephone number is (571)272-3969. The examiner can normally be reached on Monday-Friday(8:00-5:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Follansbee can be reached on (571)272-3964. The fax phone numbers for the organization where this application or proceeding is assigned are as follows:

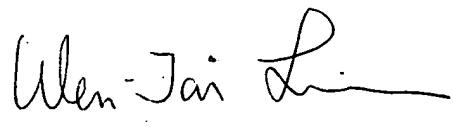
(703)872-9306 for official communications; and

(571)273-3969 for status inquires draft communication.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Wen-Tai Lin

April 27, 2005


4/27/05